tolerance polypeptide at effective levels in a cell renders the cell tolerant towards an herbicide, the method comprising:

(a) providing a plurality of nucleic acid segments derived from a plurality of variant forms of a gene, wherein the gene encodes a UDP-N-acetylglucosamine enolpyruvyltransferase;

(b) recombining the plurality of nucleic acid segments to produce a library of recombinant nucleic acids;

(c) screening the library to detect a recombinant herbicide tolerance nucleic acid that encodes an herbicide tolerance polypeptide that catalyzes the conversion of phosphoenolpyruvate plus shikimate-3-phosphate to 5-enolpyruvylshikimate-3-phosphate, wherein expression of the herbicide tolerance polypeptide at effective levels in the cell renders the cell tolerant towards the herbicide; and

(d) recovering the recombinant herbicide tolerance nucleic acid that encodes an herbicide tolerance polypeptide having EPSP synthase activity.

65. (amended) The method of claim 4, wherein:

step (a) further comprises providing an EPSP synthase nucleic acid segment derived from a gene that encodes an EPSP synthase; and

step (b) further comprises recombining the EPSP synthase nucleic acid segment with the plurality of nucleic acid segments to produce the library of recombinant nucleic acids.

REMARKS

I. Status of the claims

Claims 4, 6-8, 11, 14-16, 18-20, 22-24, 28, 30, 32-27 and 61-67 are pending and under consideration with entry of this Amendment.

A marked up copy of the amended claim is provided as an appendix entitled **"MARKED COPY OF AMENDED CLAIMS."** A courtesy copy of the pending claims as amended is also included.